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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,862

10/12/2006

Juil Lee

NL 040453

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7590

05/13/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, NICHOLAS J

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

05/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,862	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> NICHOLAS LEE	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/9/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2004/0013077 A1 to Saito et al ("Saito") in view of US Patent Pub. 2002/0003755 A1 to Fujita et al ("Fujita").

As to claim 1, Saito discloses a device for near field optical recording, the device (Fig. 8) comprising a head (1, 8, 20) including a lens (1) that is positioned by an actuator (claims 2-5, driving means) at a near field distance from a surface of the record carrier for generating a scanning spot on the track, an air gap controller (claims 2-5, controlling means) for controlling an air gap between the lens and the surface, which air gap controller has an approach mode for bringing the lens from a remove distance to the near field distance (abstract). Saito further discloses the use of a photo detector wherein the light detected is correlated with the distance between the surface of the optical recording medium and the flat portion of a lens (§ 0017). This defines the closed loop mode of a controller wherein the lens is within the near field distance to a surface of the information medium.

Saito fails to disclose an increasing periodical excitation signal for controlling the lens actuator for generating a sequence of approach instants at which the lens approaches the surface, the lens at the approach instants having a substantially zero velocity in a direction perpendicular to the surface.

Fujita further discloses a tracking error signal (Fig. 8b, TE) that is gradually increased to the maximum amplitude (¶ 0121). It would have been obvious to have used a gradually increasing signal for controlling the movement of a lens actuator in a direction perpendicular to an information surface so as to prevent deterioration of the information medium.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Saito with the teachings of Fujita as the two arts are both directed towards optical pickup devices and a method of effectively controlling optical pickup.

As to claim 2, the same rejection or discussion is used as in the rejection of claim 1. Fujita further discloses a tracking error signal (Fig. 8b, TE), which is sinusoidal, that is gradually increased to the maximum amplitude (¶ 0121).

As to claim 3, the same rejection or discussion is used as in the rejection of claim 2.

As to claim 4, the same rejection or discussion is used as in the rejection of claim 2. It would be obvious that as amplitude is gradually increased that the signal would comprise a ramp component such that signal increasing.

As to claim 6, the same rejection or discussion is used as in the rejection of claim 1. Saito further discloses a first detector and second detector which are used for generating photomagnetic signals (§ 0061-0064). It would be obvious that there exists some calculation/ transfer function corresponding to the first detector information and the second detector information for controlling the lens actuator.

As to claim 7, the same rejection or discussion is used as in the rejection of claim 6.

As to claim 8, the same rejection or discussion is used as in the rejection of claim 1 above.

As to claim 9, the same rejections or discussions are used as in the rejections of claims 3 and 8.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2004/0013077 A1 to Saito et al ("Saito") in view of US Patent Pub. 2002/0003755 A1 to Fujita et al ("Fujita"), and further in view of US Patent No. 5,272,482 to Hannah et al ("Hannah").

As to claim 5, see the discussion of Saito and Fujita above. Saito fails to disclose an increasing periodical excitation signal comprising a low-pass filtered staircase component.

Hannah discloses a signal that is supplied to a low-pass filtered staircase component (col. 2, lines 52-68) thereby removing harmonics.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Saito as modified with the teachings of Hannah so as to reduce noise in a control signal of an optical pickup causing deterioration of the recording medium.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS LEE whose telephone number is (571)270-7354. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/NICHOLAS LEE/  
Examiner, Art Unit 2627

/Joseph H. Feild/  
Supervisory Patent Examiner, Art Unit 2627